Application No. 10/628,415 Docket No.: 2121-0176P

AMENDMENTS TO THE CLAIMS

 (Previously Presented) A universal polypeptidic carrier for targeting directly or indirectly a molecule to Gb3 receptor expressing cells and having the following formula STxB-Z(n)-Cys, wherein:

STxB is the Shiga Toxin B subunit or a functional equivalent thereof,

Z is an amino-acid devoid of a sulfhydryl group, n being 0, 1 or a polypeptide,

Cys is the amino-acid Cysteine.

- 2. (Previously Presented) The universal carrier according to claim 1 wherein n is 0.
- 3. (Previously Presented) The universal carrier according to claim 1 or 2 wherein the molecule is selected from the group consisting of proteins, peptides, oligopeptides, glycoproteins, glycopeptides, nucleic acids, polynucleotides, and a combination thereof.
- 4. (Previously Presented) The universal carrier according to claim 1 or 2 wherein the molecule is covalently linked to the -S residue of the universal carrier by a -S-S-, a -S-CO-, a -S-CH₂-. or a -S-NH-linkage.
- (Previously Presented) The universal carrier according to claim 4 wherein the molecule is an antigen to be targeted to antigen presenting cells.
- 6. (Previously Presented) The universal carrier according to claim 1 or 2, wherein the universal carrier is covalently linked to an oligopeptide or a polypeptide by a -S-S-, or a -S-CO-, or a -S-CH₂- or a -S-NH linkage, and the molecule to be targeted is operably linked to said oligopeptide or polypeptide.

Application No. 10/628,415 Docket No.: 2121-0176P

7. (Previously Presented) The universal carrier according to claim 6 wherein the universal carrier is covalently linked to a poly-lysine oligopeptide and the molecule to be targeted is nucleic acid or an oligo-nucleotide operably linked to the said poly-lysine moiety.

8. (Previously Presented) The universal carrier according to claim 4 wherein the molecule is a cytotoxic drug or a pro-drug to be targeted to tumor cells expressing Gb3 receptors.

9. - 24. (Canceled)

25. (Previously Presented) A universal carrier for targeting directly or indirectly a molecule to Gb3 receptor expressing cells and having the following formula STxB-Z(n)-Cys, wherein:

STxB is the Shiga Toxin B subunit or a functional equivalent thereof.

Z is an amino acid devoid of a sulfhydryl group, n being 0, 1 or a polypeptide,

Cys is the amino acid Cysteine, wherein said molecule is selected from the group of proteins, glycoproteins, nucleic acids encoding proteins and a combination thereof.

26. (Previously Presented) A universal polypeptidic carrier for targeting directly or indirectly a molecule to Gb3 receptor expressing cells and having the following formula STxB-Z(n)-Cys, wherein:

STxB is the Shiga Toxin B subunit.

Z is an amino acid devoid of a sulfhydryl group, n being 0, 1 or a polypeptide,

Cys is the amino acid Cysteine, wherein said molecule is selected from the group of proteins, glycoproteins, nucleic acids encoding proteins and a combination thereof.

27. (New) A universal polypeptidic carrier for targeting directly or indirectly a molecule to Gb3 receptor expressing cells and having the following sequence:

COOH- MKKTLLIAASLSFFSASALATPDCVTGKVEYTKYNDDDTFTVKVGDKELFTN RWNLQSLLLSAQITGMTVTIKTNACHNGGGFSEVIFRC-NH₂ (SEQ ID NO: 1).

28. (New) A universal polypeptidic carrier for targeting directly or indirectly a molecule to Gb3 receptor expressing cells and having the following formula STxB-Z(n)-Cys, wherein:

STxB is the Shiga Toxin B subunit,

Z is an amino acid devoid of a sulfhydryl group, n being 0, 1 or a polypeptide,

Cys is the amino acid Cysteine, wherein said molecule is a cytotoxic drug or a pro-drug to be targeted to tumor cells expressing Gb3 receptors.